

## Michigan's 9-1-1 System: An Update

A look at Michigan's current emergency  
9-1-1 system – technology, funding,  
and the future of Michigan's 9-1-1.  
March 29, 2006

## A Changing 9-1-1 System

9-1-1 was developed in the early 1980's for the only method of telephone service available at that time - **landline telephones.**

With the introduction of new technologies such as wireless telephones, and now Voice over Internet Protocol (VoIP), 9-1-1 is being affected at many levels. From the network that delivers the calls to the dispatch centers that answer them. Also, the funding mechanisms tied to traditional landline services are no longer working the way they did in the past.

**However, public expectation is not changing with the technology and access to funding.**

## Current 'Snapshot' of Michigan 9-1-1

- 183 PSAPs in Michigan.
- Estimated 4.9 million wireless subscribers. Estimated landlines in excess of 8 million.
- More than 7.3 million 9-1-1 calls were reported by counties in Michigan in 2004.
- All 83 counties have deployed Phase II 9-1-1 with at least one carrier (60 of them with all providers).
- In 2004 the cost of PSAPs to provide 9-1-1 service was approximately \$195 million dollars.

## Immediate Issues Facing 9-1-1

Sunset on the current act

Participation in the financial support of 9-1-1 by the prepaid wireless through the wireless surcharge.

### **Proposed options for prepaid:**

A) By new monthly revenue based on \$50 the ARPU (average revenue per user) of wireless industry. New monthly revenue divided by the \$50 ARPU equals the number surcharges due. **Example:**  
\$100,000 of new revenue in a month would calculate like this:  
 $\$100,000 \text{ divided by } \$50 = 2000 \times .29 = \$580$

B) By active numbers with 30 cents or more at time of monthly accounting equals the 29 cent increment. **Example:**  
5,000 active numbers for month's accounting would calculate like this:  
 $5,000 \times .29 = \$750$

Handwritten calculation:  
$$\begin{array}{r} 5000 \\ \times 29 \\ \hline 45000 \\ 10000 \\ \hline 145000 \end{array}$$

## Key Issues Facing Michigan's 9-1-1

### Current Operational and Technical Surcharge System:

- As customers migrate to wireless and VoIP in many areas, decreasing revenues for 9-1-1 systems creates burden on counties/PSAPs and network.
- Not all counties/PSAPs experiencing same effect, but landline revenue decreasing in counties; some between 16 and 24%. This trend is expected to continue.
- No provisions for future network.
- Disparate amounts between technologies:
  - VoIP not required to contribute
  - Landline varies from \$0 to \$4
  - Wireless 29 cents
  - Prepaid does not participate

## Technical Landline Surcharge - Collected by Telcos

**Telephone companies can recoup their costs for maintaining the 9-1-1 network through the technical surcharge:**

■ Not to exceed \$1.00 monthly for *non-recurring* costs (collected for up to 10 years) and not to exceed \$.80 monthly for *recurring* costs.

■ Technical charge receives annual independent accounting and adjustments.

- Recurring costs recouped by a pooling process where telcos contribute and account for 9-1-1 costs on a county-by-county basis. Collecting the technical surcharge is required, **but participation in pooling is not.**

## Operational Landline Surcharge - Collected by Counties

**4% - not to exceed highest monthly base rate or \$20 (\$0.80) can be applied by vote of county commission.**

**16% - not to exceed highest monthly base or \$20 (\$3.20) applied by vote of county ballot.**

**Total cannot exceed \$4.00.**

**Currently, 65 Michigan counties use some form of landline surcharge.**

## Wireless Surcharge – Collected by State

**Collected monthly by CMRS providers on a statewide basis. Current monthly surcharge is \$.29 cents:**

**\$.25 to counties based on a formula of \$.10 per each county and \$.15 per capita.**

**\$.015 to statewide training fund for 9-1-1 dispatchers.**

**\$.01 for Michigan State Police for dispatching services and State 9-1-1 Administrator Office.**

**\$.005 to CMRS providers for collection cost.**

**Remaining \$.01 into CMRS Fund for cost recovery of CMRS's 9-1-1 expenses and related wireline Telco expenses. (CMRS cost recovery limited due to amount now going into the fund).**

## Extending the current sunset

While there's no "quick fix" to our current legislation, a solution is being pursued. An extension of the current sunset date of December 31, 2006 will give the 9-1-1 community and legislature time to pursue a long-term solution (along with an implementation window) to the funding issues that 9-1-1 is presently facing.

The goal of the 9-1-1 community is to develop a funding solution to meet the broadening demands of our present 9-1-1 system. The ETSC has tasked a work group that is currently researching and evaluating an effective solution that will:

- Meet the needs of 9-1-1 from "end to end"
- Work with the known technology
- **Be equitable in its implementation**

## Effect of the current sunset

In addition to knowing there is funding for 2007, counties with ballot-based surcharge funding have election time requirements to meet. If the sunset is not addressed until close to the December 2006 deadline, the election window will have closed for effective 2006 election opportunities.

It will also provide transition time to a new mechanism.

- Research and evaluation of a new mechanism can be completed.

## What is being done right now....

### **Stable Funding Work Group of the ETSC:**

Surveying various providers to obtain data on the different technologies effecting 9-1-1

- Looking at others states' solutions and current issues.
- Reaching agreement with the various stakeholders
- Approaching issue as long term solution: What is adopted as the revised funding system will be what the 9-1-1 community will be using in future years.

- *First and primary matters at hand are to address sunset of 2006 and prepaid wireless's participation in 9-1-1 surcharge.*

## For more information. . . .

- Visit the ETSC's web site at:  
[www.michigan.gov/msp-etsc](http://www.michigan.gov/msp-etsc)
- Contact any member of the ETSC or the ETSC's Legislative Action Subcommittee (all members are listed on the web site)
- Contact the State 9-1-1 Administrator's Office  
517-336-6414